Thermoplastic polyurethane comprising silane groups

Abstract -

The invention relates to a thermoplastic polyurethane comprising the following structural unit:

 R_2 -CO-NH-R-Si(R_1)_{3-x}(O R_1)_x

10 where:

- R is an aliphatic, araliphatic, or aromatic organic radical having from 1 to 20 hydrocarbon atoms,
- 15 R₁ is an alkyl radical or aryl radical having from 1 to 10 carbon atoms,
 - R_2 is -NR₃-CO-R₄ or -O-R₅-O-,
- R₃ is a section of the polymer chain of the thermoplastic polyurethane, in particular a radical which derives from the diisocyanate used to prepare the thermoplastic polyurethane,
- is a section of the polymer chain of the thermoplastic polyurethane, in particular a radical which derives from the following compounds used to prepare the thermoplastic polyurethane: compounds (b) reactive toward isocyanates, or from the chain extender (c),
 - R₅ is an alkylene radical having from 2 to 8 carbon atoms, preferably from 3 to 6 carbon atoms, and

x is 1, 2 or 3.

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